Ricardo N. Schiesser and Michele Vitalini

Serial No.

10/605,670

Page

11

REMARKS

This is in response to the Office Action mailed November 9, 2004. Enclosed is a petition and fee to extend the response due date to March 9, 2005. Reconsideration is requested.

Disposition of Claims.

Claims 1-62 are pending in the application. Claims 7-17, 30-51 and 55 were withdrawn from consideration pursuant to a species election requirement. Claims 32-51 are cancelled. It is submitted that claims 1, 21, 52 and 56 are allowable generic claims. Accordingly, the claims withdrawn pursuant to the species election should be brought back into the case. Accordingly, claims 1-31 and 52-62 remain pending in the application and all are at issue.

Claim Rejection - 35 U.S.C. § 102(b).

Claims 1-6, 18-23, 25-29 and 52-54 were rejected under 35 U.S.C. § 102(b) as being anticipated by United States Patent 6,694,220 B1 issued to Tanz (hereinafter referred to as "Tanz"). Tanz is directed to an apparatus for handling individually packaged goods including a control device in conjunction with an image processing system that coordinates individual movements in such a way that randomly fed individual package goods can be separated, aligned, conveyed, sorted, stored and sequenced (see abstract). Tanz calls for conveying means in the form of a spherical transport part which is mounted without a fixed axis and, for example, is driven electromechanically in such a way that the direction can be selected freely (column 2, lines 25-28). Tanz refers to United States Patent 5,808,395, "Torque Motor," and United States Patent 5,410,232, "Spherical Motor and Method" as examples of the configuration of such conveying means (column 3, lines 5-8). Tanz discloses a step 21 in which it is determined whether the orientation of an item is correct, and, if not, a further alignment 22 is carried out. There is no detailed disclosure of how such further alignment is to be performed.

Ricardo N. Schiesser and Michele Vitalini

Serial No.

10/605,670

Page

12

Amended claim 1 specifies a system for manipulating articles generally traveling in a direction of conveyance, including a bed comprising a plurality of conveyor groups. The conveyor groups comprise a plurality of individual conveyors. The individual conveyors comprise belt conveyors. The system further includes a controller that is adapted to rotate an article positioned on the bed by controlling the speed of selected ones of the conveyors underneath the article such that a first one of the selected ones of the conveyors has a different speed than a second one of the selected conveyors. It is submitted that Tanz does not disclose, teach or suggest the system of amended claim 1 including the features set forth above.

Amended claim 21 is directed to a method of manipulating articles, including providing a bed having at least one conveying surface adapted to move articles in the direction of conveyance from an upstream end to a downstream end of the bed, the at least one conveying surface comprising a plurality of side-by-side belt conveyors. Claim 21 further specifies that, if an article is to be rotated, rotating the selected article by driving the ones of the conveyor belts at different speeds from each other. It is submitted that Tanz does not disclose, teach or suggest the method specified in amended claim 1 including the features set forth above.

Amended claim 52 specifies a system for manipulating articles generally traveling in a direction of conveyance including a bed comprising a plurality of conveyor groups, the conveyor groups being generally aligned with each other in the direction of conveyance, and each of the conveyor groups comprising a plurality of individual conveyors positioned side-by-side in a direction transverse to the direction of conveyance. The conveyors are specified as comprising belt conveyors. The system further includes a controller adapted to manipulate articles traveling on the bed by controlling the speed of the conveyors. The control is further adapted to be able to control the speed of the conveyors at more than two different non-zero speeds. It is submitted that Tanz does not disclose, teach or suggest the system of amended claim 52 including the features set forth above.

Claim 24, which is a dependent claim that depends from claim 21 as a base claim, was rejected under 35 U.S.C. § 103 over the combination of Tanz with United States

Patent 5,145,049 issued to McClurkin (hereinafter referred to as "McClurkin"). Claim 24

Ricardo N. Schiesser and Michele Vitalini

Scrial No.

10/605,670

Page

13

specifies that the individual conveyors are belt conveyors. McClurkin discloses belts 40 and means for adjusting the axis of rotation thereof to transfer bundles between the adjoining conveyors. Claims 1, 21 and 52 specify that an article is manipulated, or rotated, by controlling the speed of the conveyors underneath the article. This is different from rotating the axis of the pulley driving the belt as specified in McClurkin. It is submitted that, even if the disparate disclosures of McClurkin and Tanz are combined, the invention as defined in claims 1-31 and 52-55 is not disclosed. Moreover, it is submitted that there is no motivation in the art for the combination and the combination would destroy the principle of operation of the primary reference. Accordingly, it is submitted that the rejection has been overcome. Withdrawal of the rejection of claims 1-31 and 52-55 is respectfully requested.

Claim Rejections - 35 U.S.C. § 103.

Claims 56-62 were rejected under 35 U.S.C. § 103(a) as being unpatentable over United States Patent 5,779,023 issued to Hidai et al. (hereinafter referred to as "Hidai"). Amended claim 56 specifies an article manipulation bed comprising a plurality of conveyor groups, the conveyor groups being generally aligned with each other in the direction of conveyance and each of the conveyor groups comprising a plurality of conveyor units positioned side-by-side in a direction transverse to the direction of conveyance. Each of the conveyor units is specified as comprising a first assembly having a first drive roller about which a first conveyor belt is at least partially reeved and a first motor driving the first conveyor belt. The first drive roller and the first motor are rotatable about a common first axis. Each of the conveyor units is further specified as including a second assembly including a second drive roller about which a second conveyor belt is at least partially reeved and a second motor driving the second conveyor belt. The second drive roller and the second motor are rotatable about a common second axis. The first and second axes are not collinear with respect to each other in a direction transverse to the direction of conveyance and the motor of one of the first and second assemblies at least partially overlaps the conveyor belt of the other of the first and second assemblies to facilitate close spacing of the first and second conveyor belts. It is submitted that the invention as defined

Ricardo N. Schiesser and Michele Vitalini

Serial No.

10/605,670

Page

14

in amended claim 56 including the features set forth above is not disclosed, taught or suggested by Hidai. Accordingly, it is submitted that the rejection has been overcome.

The application should be in a condition for allowance. A notice to that effect is earnestly solicited. If the Examiner has any questions or reservations, the Examiner is requested to call the undersigned attorney.

Respectfully submitted,

RICARDO N. SCHIESSER and MICHELE VITALINI

By: Van Dyke, Gardner, Linn & Burkhart, LLP

Dated: March 9, 2005.

Frederick S. Burkhart, Registration No. 29 288

2851 Charlevoix Drive, S.E., Suite 207

Post Office Box 888695

FSB:djr

SIE04 P-104A

Grand Rapids, Michigan 49588-8695

(616) 988-4104